

REMARKS

Applicants respectfully request reconsideration and allowance of all pending claims.

1. Status of the Claims

In this Amendment B, claims 15, 20, and 27 have been amended, and claims 32-36 have been added, to more particularly claim certain embodiments of the present invention, while claims 21-24 have been amended for purposes of clarification only. Further, claims 1-10, 12, 13 and 29-31 have been cancelled.

Accordingly, claims 15-17, 20-28 and 32-36 are now pending and under consideration at this time.

As noted above, claims 15 and 20 have been amended to more particularly claim certain embodiments of the present invention. Specifically, claims 15 and 20 has been amended to state that C is a carbon atom, and L, the linker, is a single bond. Support for these amendments may be found, for example, in claims 15 and 20 as originally filed. Additionally, claim 20 has been amended for purposes of clarification, the reference to "molecule" being replaced by the phrase "solid phase bound organic conjugate."

Finally, claims 32-36 have been added. Support for these claims may be found, for example, in claims 16, 28, 17, 25 and 26, respectively, as previously presented.

2. Restriction and Election of Species

Consistent with Applicants' Amendment A, filed in response to the Restriction Requirement without traverse, claims 1-10, 12 and 13 have been canceled for being directed to a non-elected invention. Applicants respectfully reserve the right to timely file one or more divisional applications directed to the subject matter of these claims, and/or the subject matter of the other cancelled claims (e.g., claims 14, 18, 19 and 29-31).

With respect to the election of species and the claims currently under examination, Applicants point out that claims 25 and 26 were identified in Applicants' Amendment A as reading on the elected invention and species. Therefore, Applicants respectfully submit that these claims have not been withdrawn, and therefore are currently under examination.

Finally, Applicants submit that new claims 32-36 read on the elected invention and species, and therefore are under examination at this time, as well.

3. Priority

Applicants have noted the Office's comments regarding the priority date to which the present claims are entitled. In view of the amendments and arguments presented herein below, particularly with respect to Langer et al., the priority date for these claims does not appear to be an issue. In the interests of brevity, therefore, Applicants have not addressed this matter in detail, but they respectfully reserve the right to do so at a later date, if necessary. Applicants do, however, call the Office's attention to the text beginning at page 5, line 3 and running to page 6, line 10, of EP Application No. 02078743.8 (filed September 3, 2002), which clearly discloses a solid phase embodiment of the present claims.

4. 35 U.S.C. §112, Second Paragraph Rejections

Applicants respectfully request reconsideration of the rejection of claims 15-17 and 20-28 under 35 U.S.C. §112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 15 and 20 have been amended to identify "C" in the structure as a "carbon atom" rather than a "methylene group." Applicants submit this amendment is supported by the language of the claims themselves, as well as the text discussing these structural features in the application (see, e.g., identification of R₄ and R₅ as either hydrogen or non-hydrogen substituents, in the claims and in paragraph 18 of the U.S. published application, 2006/0165594). Applicant submit that one of ordinary skill in the art would recognize this "C" is a methylene group when R₄ and R₅ are both hydrogen, but that this "C" is something other than "methylene" when R₄ and R₅ are not hydrogen.

Additionally, claim 20 has been amended to replace "molecule" with "solid phase bound organic conjugate". This is consistent, for example, with the language of claim 15 and related text in the application.

In view of the foregoing, Applicants respectfully submit claims 15 and 20 satisfy the requirements of 35 U.S.C. §112, second paragraph. Reconsideration and withdrawal of the rejection of these claims is therefore requested.

Inasmuch as claims 16, 17 and 25-28 depend from claim 15, and claims 21-24 depend from claim 20, it is submitted that these claims satisfy the requirements of 35 U.S.C. §112, second paragraph for at least the same reasons as those set forth with respect to claims 15 or 20, as well as the other requirements recited therein.

5. 35 U.S.C. §102(b) Rejections

Applicants respectfully request reconsideration of the rejection of claims 15, 16, 20-24 and 27 under 35 U.S.C. §102(b) as being anticipated by Langer et al (2001 Bioconjugate Chem.).

As noted above, claim 15, from which claims 16, 17 and 25-28 depend, and claim 20, from which claims 21-24 depend, have been amended to require, in relevant part, that the linker L is a single bond. Accordingly, in the formula of the solid phase bound organic conjugate referenced therein, the nitrogen atom of the coordinating compound is bound to the solid phase support by a single intervening carbon atom.

In contrast to claims 15 and 20, Langer et al. disclose a solid phase organic conjugate wherein the nitrogen atom of interest (i.e., the nitrogen atom of the coordinating compound) is bound to the solid phase support through a linker that is more than a single bond; that is, the nitrogen atom of the coordinating compound is bound to the solid support through more than a single intervening carbon atom. (See, e.g., Figure 1 and the discussion related to peptide synthesis on page 1029, as well as Figure 2 on page 1031.) Notably, Langer et al. fail to disclose or suggest a structure wherein the nitrogen atom of the coordinating compound is bound by a single intervening carbon atom to the solid support. In fact, the Office has already acknowledged this fact. (See page 7, second full paragraph, of the present Office action.)

In view of the foregoing, Applicants submit Langer et al. fail to disclose or suggest each and every element of the claimed solid phase bound organic conjugate (claim 15) or a kit comprising it (claim 20). Applicants therefore further submit there is no anticipation of the subject matter of claim 15 or claim 20, and thus request reconsideration of the rejection of these claims.

Inasmuch as claims 16, 17 and 25-28 depend from claim 15, and claims 21-24 depend from claim 20, Applicants submit these claims are novel over Langer et al. for at least the same reasons as those set forth above with respect to claim 15 or claim 20. Therefore, reconsideration of the rejection of these claims is requested, as well.

6. 35 U.S.C. §103 Rejections

Applicants respectfully request reconsideration of the rejection of claims 15-17, 20-24, 27 and 28 under 35 U.S.C. §103 as being obvious in view of the combination of Langer et al. (as detailed above) and Dunn-Dufault et al. (2000 Nuclear Medicine and Biology).

A. Claim Subject Matter and Langer et al.

The details of claim 15, from which claims 16, 17 and 25-28 depend, and claim 20, from which claims 21-24 depend, as well as Langer et al., are set forth above. In the interests of brevity, these will not be repeated here. However, Applicants reiterate that Langer et al. fail to disclose or suggest a solid phase bound organic conjugate, wherein the nitrogen atom of the coordinating compound is bound by a single intervening carbon atom to the solid support. Furthermore, the Office has already acknowledged this fact.

B. Dunn-Dufault et al.

Contrary to the Office's assertion, Dunn-Dufault et al. fail to disclose or suggest a structure wherein the nitrogen atom of the coordinating compound is bound by a single intervening carbon atom to the solid support. Rather, the solid phase organic conjugate referenced therein, and specifically illustrated in Figure 1 on page 804 therein, contains a nitrogen atom that is bound to the solid phase support through a linker that is a series of carbon atoms, and thus more than a single bond; that is, like Langer et al., the nitrogen atom of the coordinating compound is bound to the solid support through more than a single intervening carbon atom. (See, e.g., Figure 1, wherein the nitrogen atom is bound to a carbon atom, which in turn is bound to seven more carbon atoms before contacting the solid support.)

C. The Claimed Subject Matter is Not Obvious

As set forth in M.P.E.P. §2143, in order for the Office to establish a *prima facie* case of obviousness, three basic criteria must be met: (1) the prior art references, when combined, must teach each and every element of the claim; (2) there must be some suggestion or motivation,

either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the references; and (3) there must be some reasonable expectation of success.

Applicants respectfully submit the Office has failed to establish a *prima facie* case of obviousness because each and every element of the claims have not been disclosed or suggested. Specifically, as noted above, both Langer et al. and Dunn-Dufault et al. fail to disclose or suggest a solid phase bound organic conjugate, or a kit comprising it, having a structure wherein the nitrogen atom of the coordinating compound is bound by a single intervening carbon atom to the solid support. Stated another way, neither of the cited references disclose a structure wherein the linker is a single bond. Rather, both of the cited references disclose a linker that is a series of carbon atoms (Dunn-Dufault et al.) or a series of molecules (Langer et al.).

Applicants additionally submit that the Office has failed to establish a *prima facie* case of obviousness because motivation is simply not provided by the cited combination of references to prepare the claimed solid phase bound organic conjugate, or a kit comprising it. Specifically, as noted above, both of the cited references fail to even reference a solid phase bound organic conjugate, or a kit comprising it, having a structure wherein the nitrogen atom of the coordinating compound is bound by a single intervening carbon atom to the solid support. Stated another way, both of the cited references fail to even reference a structure wherein the linker is a single bond.

In view of the foregoing, Applicants respectfully submit the subject matter of claim 15 and claim 20 is patentable over the cited combination of references. Applicants therefore request reconsideration of the rejection of these claims.

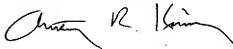
Inasmuch as claims 16, 17 and 25-28 depend from claim 15, and claims 21-24 depend from claim 20, Applicants submit these claims are patentable over the cited combination of references for at least the same reasons as those set forth above with respect to claim 15 or claim 20. Therefore, reconsideration of the rejection of these claims is requested, as well.

CONCLUSION

In view of the foregoing, Applicants request favorable reconsideration and allowance of all pending claims.

The Commissioner is hereby authorized to charge Deposit Account No. 13-1160, should any fees be due at this time.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Anthony R. Kinney", is written over the typed name.

Anthony R. Kinney, Reg. No. 44,834
COVIDIEN
675 McDonnell Boulevard
Hazelwood, Missouri 63042
(314) 654-3960

Mail Stop Amendment